

PLACE DIRECTORATE
South Yorkshire Mining Advisory Service



To: Development Management

FAO: Stacey White

My Ref: 2021/1090

Your Ref: 2021/1090

Date: 11th October 2021

Enquiries to: [REDACTED]

Ext: [REDACTED]

Subject: Hybrid application for residential development for 1,760 dwellings comprising: a) Full planning permission for: earthworks to create development platforms; strategic drainage ponds and associated drainage infrastructure; construction of a new link road; location of strategic landscaping and ecological areas; demolition of existing buildings; works to Hermit Lane; and erection of Phase 1 residential development comprising 229 dwellings b) Outline planning permission for: Residential development comprising 1,531 dwellings; new primary school; small shops and community facilities; and associated infrastructure works.

Further to your consultation request I have the following comments.

The site is located within a Coal Authority coal mining referral area due to the presence of opencast backfill, opencast highwalls, shallow workable coal and potential shallow coal mineworking's and mineshafts. The land is therefore potentially at risk from coal mining legacy risks such as ground instability.

The proposals are supported by a Geo-environmental Phase I Desk Study, Preliminary Geo-environmental Ground Investigation, Coal Mining Risk Assessment and Coal Recovery Reports, the Site Preparation and Earthworks Strategy Report and the Preliminary Slope Stability Report. The proposals are also supported by ES - Chapter 10 Ground Conditions.

To ensure the safe and sustainable development of the site the reports make numerous recommendations for further ground investigation, the results of which will further inform ground remediation and design mitigation requirements for the current area of being considered and the wider site as a whole.

It is recommended that if planning permission is approved a condition be attached to the decision notice to ensure the developer(s) adequately address mining legacy issues on site so it progresses in a safe and sustainable manner.

For your assistance a draft condition is set out below

The site is located within a Coal Authority coal mining referral area due to the presence of opencast backfill, opencast highwalls, shallow workable coal and potential shallow coal mineworking's and mineshafts. The land could therefore be at risk from mining legacy risks such as ground instability and fugitive gas migration. A suitably qualified third-party consulting engineer shall be appointed to advise upon the necessary site investigations, ground remediation and design mitigation requirements. The developer shall ensure these recommendations are planned and actioned in a timely manner in the context of the wider development and in consideration of Construction Industry Research and Information association publication C758D "Abandoned Mine Workings Manual" where applicable.

As recommended in the JPG preliminary geo-environmental ground investigation report ref 848-JPG-SW-XX-RP-G-0603-S2-P02 dated July 2019 the scope of works shall include but not be limited to the following

- Rotary boreholes to target areas of uncertainty regarding unrecorded underground coal mine workings.*
- Targeted mine entry investigation of any recorded mine entries on the site.*

- *Delineation of the opencast highwalls to map no build zones using techniques such as geophysics, rotary open hole probing and trial trenching.*
- *Trial pits across the site to obtain more samples for geotechnical and chemical testing to further inform design.*
- *Intrusive boreholes with in-situ testing, to provide further geotechnical parameters and to obtain undisturbed geotechnical samples. Gas and groundwater monitoring wells to be installed in selected boreholes.*
- *Quarterly monitoring of extensometers to be continued as long as possible to inform creep settlement assessment.*
- *Static cone penetration testing to assess the in-situ geotechnical parameters.*
- *Further slope stability assessment and design to ensure industry best practice factors of safety are achieved.*
- *Further geotechnical & chemical testing to classify materials and inform foundation design.*
- *Further assessment of the groundwater regime below the site, to include groundwater contours.*
- *Embankment testing to assess the effects of raising ground levels in areas of fill and the effectiveness of surcharging in relation to future settlement.*

*A validation report undertaken by the third-party consulting engineer shall be submitted upon completion of the development platforms and prior to construction of permanent end use buildings. The report shall detail the findings of the investigations and any recommended mitigation/remediation required in the construction of any end use permanent buildings (employment or residential use). Responsibility for securing a safe and sustainable development rests with the developer and/or landowner”
Reason- Land stability NPPF sections 178 a,b,c. 179 and 170 e & f*

Principal Mining Engineer.